

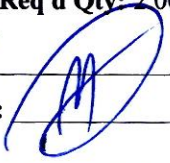
Work Order ID 162020

Tuesday, May 23, 2017 11:07:55 AM

162020

Page 1

Item ID: D412-724-041 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Head Rest Assembly, Center
Start Date: 5/31/2017 Start Qty: 2.00 ***2*** Cust Item ID:
Required Date: 6/2/2017 Req'd Qty: 2.00 ***2*** Customer:
Reference:

Approvals: Process Plan:  Date: MAY 24 2017 Tooling: Date: Run Start ***NR1***
QC: Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
N/A	Rev N/A								
100	Document Control	0.00							
100	DOCUMENT CONTROL								
DC	Memo	0.00							
Doc.Control -USB or Paperwork	If D412-724-041 is a W/O on it's own, Photocopy bluefile and create labels per PPP D412-724-041 CHG001								
110	Pick Kit	0.00							
110									
Packaging	Memo	0.00							
Packaging									
120	QC4- 100% Inspect kits for completeness	0.00							
120									
QC	Memo	0.06							
Quality Control									

DAS
6
9-89
MAY 30 2017

DAS
27
9-89

JUN 01 2017

MAY 30 2017

DAS
26
9-89

DAS
28
9-89

DAS
27
9-89

JUN 01 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause		FAULT CATEGORY					
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐						
OTHER :							

Work Order ID 162020***162020***

Page 2

Tuesday, May 23, 2017 11:07:55 AM

Item ID: D412-724-041 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Head Rest Assembly, Center
Start Date: 5/31/2017 Start Qty: 2.00 ***2*** Cust Item ID:
Required Date: 6/2/2017 Req'd Qty: 2.00 ***2*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Identify as per dwg & Stock Location: _____	0.00							
130	Packaging								
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D412-724-041 Location : FG017								
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.20							
Quality Control									

DAS 27 9-89

JUN 01 2017

DAS 21 9-89 JUN 01 2017

DAS 21 9-89 JUN 01 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Picklist Print

Tuesday, May 23, 2017 11:07:54 AM

Page 1

Work Order ID: 162020

162020

Parent Item: D412-724-041

D412-724-041

Parent Item Name: Head Rest Assembly, Center

Start Date: 5/31/2017

Required Date: 6/2/2017

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev:A04.09.08New IssueKJ/JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

AN525-10R6

Purchased

No

120

Each

426.0000

4

8

AN525-10R6

Screw

**

DAS
26
9-89

DAS
28
9-89

MAY 30 2017

Location

Loc Qty

Loc Code

ST329

426

M134502

26

M137307

400

8x.

D3303-041

Manufactured

No

120

Each

7.0000

1

2

D3303-041

Head Rest

**

DAS
26
9-89

DAS
28
9-89

MAY 30 2017

Location

Loc Qty

Loc Code

ST457

7

158123

5

159042

2

2x.

D3304-041

Manufactured

No

120

Each

3.0000

1

2

D3304-041

Tube Assembly

**

DAS
26
9-89

DAS
28
9-89

MAY 30 2017

Location

Loc Qty

Loc Code

ST458

3

144764

1

156269

2

1x.
1x.

DAS
27
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐				
								OTHER : _____	

Work Order ID 162020

162020

Page 1

Tuesday, May 23, 2017 11:07:55 AM

Item ID: D412-724-041

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Head Rest Assembly, Center

Start Date: 5/31/2017 Start Qty: 2.00

2

Cust Item ID:

Required Date: 6/2/2017 Req'd Qty: 2.00

2

Customer:

Reference:

Run Start

NR1

Approvals:

Process Plan:

Date: MAY 24 2017

Tooling:

Date:

Stop

NR2

QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

N/A

Rev N/A

DAS
6 MAY 30 2017
B-BQ

100

Document Control

0.00

100

DOCUMENT CONTROL

DC

Memo

0.00

Doc.Control -USB or Paperwork

If D412-724-041 is a W/O on it's own, Photocopy bluefile and create labels per
PPP D412-724-041 CHG001

CB

D

MAY 31 2017

110

Pick Kit

0.00

110

Packaging

Memo

0.00

Packaging

120

QC4- 100% Inspect kits for completeness

0.00

120

QC

Memo

0.06

Quality Control



Transport Canada

Transports Canada

Department of Transport

Part Design Approval

This approval is issued to:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, Ontario
Canada K6A 1K7

Number: PDA04-11**Issue No.:** 1**Approval Date:** September 17, 2004**Issue Date:** September 17, 2004**Responsible Office:**

Ontario

Aeronautical Product Type or Model:

BELL 205A-1, 205B, 212, 412, 412 CF, 412 EP

Canadian Type Certificate or Equivalent:

BELL 205B H-104

BELL 212, 412, 412 CF, 412 EP H-86

BELL 205A-1 H1SW

Complies with FAA Type Certificates: H1SW, H4SW

Replacement Part:

Replacement Headrests

-See Eligibility List-

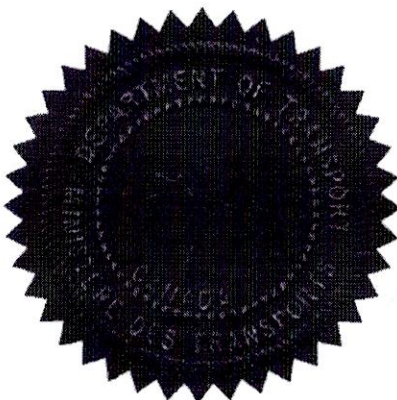
**Installation/Operating Data,
Required Equipment and Limitations:**

Manufacture of the Replacement Headrests must be in accordance with Dart Aerospace Ltd. Document Record, DR-D412-724, Rev. B, dated 04.09.17, or later approved revisions.

Installation of the Replacement Headrests must be in accordance with Dart Aerospace Ltd. Installation Instructions, IIN-D412-724, Rev. A, dated 04.08.19, or later approved revisions.

Maintenance of the Replacement Headrests must be in accordance with Dart Aerospace Ltd. Instructions for Continued Airworthiness, ICA-D412-724, Rev. 0, Transport Canada accepted Sep 17 2004, or later Transport Canada accepted revisions.

See continuation sheet



Conditions: The installation of the approved part is to be limited only to the type / model of aeronautical product(s) listed above.

K.R. Bruce
For Minister of Transport

Canada

REFERENCE ONLY**3.0 INSTALLATION PROCEDURE****To install a Dart Head Rest Assembly:**

- 3.1 If installed, remove the existing Head Rest Assembly by pulling the quick release pin that attaches it to the seat. Make note of the installation position (if applicable).
- 3.2 Inspect the seat for damage in the vicinity of the Head Rest Assembly. Consult the Aircraft Maintenance Manual for disposition if damage is observed.
- 3.3 If only replacing the Head Rest with the equivalent Dart D3303-041 Head Rest, separate the existing Head Rest from the existing Tube Assembly by undoing 4 screws. Re-assemble D3303-041 Head Rest with existing Tube Assembly by installing 4 screws and tightening to 15-25 in lb.
- 3.4 If only replacing the Tube Assembly with a Dart D3304-041/-043/-044 Tube Assembly, separate the existing Head Rest from the existing Tube Assembly by undoing 4 screws. Re-assemble existing Head Rest with Dart D3304-041/-043/-044 Tube Assembly by installing 4 screws and tightening to 15-25 in lb.
- 3.5 Slide the new or modified Head Rest Assembly into the seat tube and lock in place at the same location that the old Head Rest Assembly was installed (if applicable) using the quick release pin. Ensure pin is properly engaged.

4.0 WEIGHT AND BALANCE

There is negligible weight change associated with the installation of the Dart Head Rests.

5.0 PARTS LIST

QTY -011	QTY -041	QTY -043	QTY -044	Part Number	Description
X				D412-724-011	Dart Replacement Head Rest Kit, for 205/212/412
2	X			D412-724-041	Head Rest Assembly, Center
1		X		D412-724-043	Head Rest Assembly, LH
1			X	D412-724-044	Head Rest Assembly, RH
	1	1	1	D3303-041	Head Rest
	1			D3304-041	Tube Assembly
		1		D3304-043	Tube Assembly
			1	D3304-044	Tube Assembly
	4	4	4	AN525-10R6	Screw

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Revision: **A**

Date: 04.08.19